UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001

ACRSR-2193

May 17, 2006

Mr. Luis A. Reyes
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: MODIFIED DRAFT FINAL REVISION 4 TO REGULATORY GUIDE 1.97, "CRITERIA FOR ACCIDENT MONITORING INSTRUMENTATION FOR NUCLEAR POWER PLANTS"

Dear Mr. Reyes:

During the 530th meeting of the Advisory Committee on Reactor Safeguards, March 9-11, 2006, we reviewed the draft final Revision 4 to Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," and provided comments in our letter dated March 28, 2006. During our 532nd meeting, May 4-5, 2006, we reviewed an alternative proposal by the staff to accommodate the comments and recommendations included in our March 28, 2006 letter. During our review, we had the benefit of discussions with representatives of the NRC staff and industry. We also had the benefit of the documents referenced.

RECOMMENDATION

The staff should issue the modified Revision 4 to Draft Regulatory Guide 1.97 as final.

DISCUSSION

Draft final Revision 4 to Regulatory Guide 1.97 endorses IEEE Standard 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Generating Stations," with exceptions. IEEE Std 497-2002 is intended to supersede IEEE Std 497-1981 and IEEE Std 497-1983. This revised Standard provides a consolidated source of post-accident monitoring requirements, the associated bases, and a new method for selecting and applying criteria to accident monitoring instrumentation. It is primarily intended for new nuclear power plants, though it also contains appropriate guidance and provides a flexible basis for making changes to such systems in operating plants.

In our letter dated March 28, 2006, we recommended that Draft Final Revision 4 to Regulatory Guide 1.97 not be issued in its then current form. In particular, we stated, "The staff should revise Regulatory Position 1 to allow licensees to adopt the IEEE 497-2002 Standard to modify individual accident monitoring instruments without a complete analysis of all accident monitoring instrumentation." We agreed with the staff's position "that licensees should not be allowed to use the IEEE 497-2002 Standard to eliminate or reclassify accident monitoring instrumentation required by previous editions of this Standard unless Revision 4 to Regulatory Guide 1.97 is adopted in its entirety."

The staff has now proposed a more flexible alternative to Regulatory Position 1. Specifically, the staff deleted the previous guidance regarding partial conversions and added the following new guidance regarding modifications:

> "If the licensee voluntarily uses the criteria in Revision 4 of this guide to perform modifications that do not involve a conversion, the licensee should first perform an analysis to determine the complete list of accident monitoring variables and their associated types in accordance with the selection criteria in Revision 4."

The staff's proposed change to Regulatory Position 1 meets the intent of our recommendations. It provides assurance that the licensee and the staff will have the information needed to review the basis for proposed modifications. It provides sufficient flexibility to apply IEEE Std 497-2002 to accident monitoring instrument replacements and modifications in existing plants.

Sincerely,

/RA/

Graham B. Wallis
Chairman

References:

1. Memorandum from C. Paperiello, Director, Office of Nuclear Regulatory Research, to J. Larkins, Executive Director, Advisory Committee on Reactor Safeguards, Subject: Request for ACRS Review of Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," Revision 4, dated January 30, 2006.
2. Regulatory Guide 1.97 (Draft was issued as DG-1128, dated June 2005), "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," Revision 4, dated April 2006.
3. IEEE Standard 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Generating Stations," dated September 30, 2002.
4. Letter from G. Wallis, Chairman, Advisory Committee on Reactor Safeguards, to L. Reyes, Executive Director for Operations, NRC, Subject: Draft Final Revision 4 to Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," dated March 28, 2006.
5. Letter from L. Reyes, Executive Director for Operations, NRC, to G. Wallis, Chairman, Advisory Committee on Reactor Safeguards, Subject: Draft Final Revision 4 to Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," dated April 20, 2006.

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